

How natural medications affect the brain

Study shows that the impact of low-dosed medications can be observed in an EEG

Gießen / Baden-Baden (Germany) – How does medicine affect our brain? Prof. Dr. Wilfried Dimpfel from the Justus Liebig University in Gießen, Germany, uses electricity to come up with the answer. He measures brain waves with the help of an electroencephalogram (EEG) to characterize the impact of pharmaceuticals. Using one of the homeopathic medications produced by the pharmaceutical company Heel as an example, he examined its effects, compared it to other medications and created a differentiated profile.

The electroencephalogram (EEG) is an approved standard method in medical diagnostics. It measures the electric signals that nerve cells in the brain use to communicate. Based on the region of the brain and the frequency of these electrical activities, the psychopharmacological effect of medication can be described, among other information. Each drug produces an individual reaction pattern.

The pharmacologist Prof. Dr. Wilfried Dimpfel examined the effect of a medication that contains several natural active pharmaceutical ingredients in homeopathic dilution, including passion flower and oats. Within an hour after taking the drug, the brain activity in certain regions already becomes more intense. It then reaches its peak after two to three hours and gradually decreases.

“Although the active pharmaceutical ingredients in the homeopathic preparation are highly diluted, the brain shows a strong reaction,” Dimpfel says. “The low dosage possibly even has a higher impact: In pre-clinical experiments, the brain’s response was even stronger if the dose was half of a pill per kilogram of body weight instead of a whole pill,” he adds.

The electrical activity was measured in four brain regions: the hippocampus and the frontal cortex, in which memories and emotions are processed, as well as the striatum and the formatio reticularis that controls conscious and unconscious brain functions via messenger substances.

“The pattern of brain activities implies a relaxing effect of this medication,” explains Dr. Bernd Seilheimer, Head of Bioregulatory Research at the pharmaceutical company Heel in Baden-Baden, Germany. “The EEG has verified the results of previous observational studies. It shows a great similarity to the effect of chemical tranquilizers. Hence, we can assume that the mechanisms of action are similar. Due to its good tolerability, the homeopathic medication is particularly well-suited for stress therapies,” Seilheimer adds.

Through its studies on the effectiveness of homeopathic medications based on proven scientific standards, the pharmaceutical manufacturer Heel builds the bridge between homeopathy and conventional medicine. The pre-clinical study conducted by Prof. Dr. Wilfried Dimpfel, University of Gießen, was presented on December 3, 2010, at the European Congress for Integrative Medicine in Berlin and published in the European Journal of Integrative Medicine (issue 2, volume 4, pages 227 - 228).

Heel is a pioneer in the field of research on natural medicine on the basis of scientific standards. At Heel, a worldwide team of experts continuously works on expanding the scientific basis for its own products, but also on examining the underlying bioregulatory processes. The company spends a double-digit million Euro amount on scientific medical research each year. Its current activities include 50 research projects involving renowned international experts, institutes and universities from twelve countries.

Heel is a pharmaceutical company that develops, manufactures and distributes medications based on natural substances. Being the global leader in homeopathic combination preparations, the company is also a pioneer in the field of scientific research in natural healthcare. In cooperation with academic institutions, Heel actively fosters the concept of Integrative Medicine and is striving to build the bridge between homeopathy and conventional medicine to improve patient care and healing. The 'Biologische Heilmittel Heel GmbH' with its corporate headquarters located in Baden-Baden/Germany and a staff of 1,300, achieved an annual turnover of 184 million Euros in 2010 – more than 70 percent of it outside of Germany. Heel medications are available through subsidiaries and distribution partners in over 50 countries around the world. www.heel.com

530 words, 3,577 characters (incl. blanks)

Press contact:

Biologische Heilmittel Heel GmbH
Matthias Reinig
Head of Corporate Communications
Phone: +49 7221 501-276
Fax: +49 7221 501-480
E-mail: reinig.matthias@heel.de
Internet: www.heel.de / www.heel.com